



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Ridge Walker
Sale AT-341-2026-W01219-02

District: Astoria

Date: September 17, 2025

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$3,255,794.75	\$0.00	\$3,255,794.75
		Project Work:	(\$91,260.00)
		Advertised Value:	\$3,164,534.75



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District: Astoria

Date: September 17, 2025

Timber Description

Location:

Stand Stocking: 80%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
Douglas - Fir	30	0	97
Western Hemlock / Fir	20	0	95
Sitka Spruce	11	0	95

Volume by Grade	2S	3S & 4S 6"-11"	3S 12"+	Total
Douglas - Fir	5,227	769	310	6,306
Western Hemlock / Fir	69	18	0	87
Sitka Spruce	0	4	0	4
Total	5,296	791	310	6,397

Comments: Pond Values Used: Local Pond Values, September, 2025.

Expected Log Markets: Clatskanie, Forest Grove, Mist, Sheridan, St. Helens, Noti, Tillamook, Warrenton, Wauna, Willamina, Elma, WA, Longview, WA, Everett, WA

PRICING:

Cedar stumpage = pond value - (Douglas-fir) logging cost.
\$941.13/MBF = \$1,200/MBF - \$258.87/MBF

Hardwood stumpage = pond value - (Douglas-fir) logging cost.
\$246.13/MBF = \$505.00/MBF - \$258.87/MBF

Other Costs (with Profit & Risk to be added):

Machine Washing for Invasive Weed Compliance = \$2,000

Ditch Filters:

12 bales of straw @ \$13.39/bale = \$160.68

4 hours of labor (installation/removal) @ \$50/hr = \$200

Line-pulling:

5 acres @ 1 acre/day x \$400 labor/day = \$2,000

Total P&R Cost = \$4,360.68

Other Costs (No Profit & Risk added): None

SLASH PILING

(See attached appraisal. Includes move-in and pile materials) = \$16,880

ROAD MAINTENANCE

(See attached Road Maintenance Cost Summary Sheet)

TOTAL Road Maintenance: \$15,803/6,397 MBF = \$2.47/MBF



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Logging Conditions

Combination#:	Douglas - Fir	94.00%
	Western Hemlock / Fir	94.00%
	Sitka Spruce	94.00%
Logging System:	Shovel	Process: Manual Delimbing
yarding distance:	Medium (800 ft)	downhill yarding: No
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF	
loads / day:	16	bd. ft / load: 5100
cost / mbf:	\$122.55	
machines:	Shovel Logger	

Combination#: 2	Douglas - Fir	6.00%
	Western Hemlock / Fir	6.00%
	Sitka Spruce	6.00%
Logging System:	Cable: Medium Tower >40 - <70	Process: Manual Falling/Delimbing
yarding distance:	Short (400 ft)	downhill yarding: No
tree size:	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF	
loads / day:	9	bd. ft / load: 4500
cost / mbf:	\$196.99	
machines:	Log Loader (A) Tower Yarder (Medium)	



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Ridge Walker
Sale AT-341-2026-W01219-02

District: Astoria

Date: September 17, 2025

Logging Costs

Operating Seasons: 3.00	Profit Risk: 12%
Project Costs: \$91,260.00	Other Costs (P/R): \$0.00
Slash Disposal: \$16,880.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$2.47

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
Douglas - Fir	\$0.00	3.0	4.5
Western Hemlock / Fir	\$0.00	2.0	4.5
Sitka Spruce	\$0.00	1.0	5.5



Timber Sale Appraisal
Ridge Walker
Sale AT-341-2026-W01219-02

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Date: September 17, 2025

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
Douglas - Fir									
\$127.02	\$2.54	\$2.06	\$95.37	\$0.00	\$27.24	\$2.64	\$2.00	\$0.00	\$258.87
Western Hemlock / Fir									
\$127.02	\$2.59	\$2.06	\$145.83	\$0.00	\$33.30	\$2.64	\$2.00	\$0.00	\$315.44
Sitka Spruce									
\$127.02	\$2.59	\$2.06	\$238.63	\$0.00	\$44.44	\$2.64	\$2.00	\$0.00	\$419.38

Specie	Amortization	Pond Value	Stumpage	Amortized
Douglas - Fir	\$0.00	\$771.78	\$512.91	\$0.00
Western Hemlock / Fir	\$0.00	\$557.07	\$241.63	\$0.00
Sitka Spruce	\$0.00	\$510.00	\$90.62	\$0.00



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Timber Sale Appraisal
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District: Astoria

Date: September 17, 2025

Summary

Amortized

Specie	MBF	Value	Total
Douglas - Fir	0	\$0.00	\$0.00
Western Hemlock / Fir	0	\$0.00	\$0.00
Sitka Spruce	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
Douglas - Fir	6,306	\$512.91	\$3,234,410.46
Western Hemlock / Fir	87	\$241.63	\$21,021.81
Sitka Spruce	4	\$90.62	\$362.48

Gross Timber Sale Value

Recovery: \$3,255,794.75

Prepared By: John Tillotson

Phone: 503-325-5451

Site Prep Appraisal

Sale Name: Ridge Walker
Date: 06/11/2025

Vegetation Type/Zone	Vegetation Type/Zone Code	Production Rate (hr/ac)	Estimated Piles/Acre	Landing Production Rate (hrs/30 acres)
Doug-fir	A	0.5	0.5	4
Hemlock/Fir	B	0.8	3.0	6
Hemlock/Spruce	C	1.8	5.0	8
Hemlock	D	1.8	5.0	8
Conifer/Hardwood	E	0.8	2.0	6
Whole Tree Yarding	F	0.5	0.3	10

Sale Area	Harvest Type	Veg Type/Zone	Ground Based Yarding Acres	Estimated Piling Hours/Area	Cost/Hour	Total Cost/Area	
1	MC	B	97	78	\$145.00	\$11,252.00	
				FALSE	\$145.00	\$0.00	
				FALSE	\$145.00	\$0.00	
				FALSE	\$145.00	\$0.00	
				In-unit Piling		Sub Total =	\$11,252.00
Sale Area	Number of Landings to be Piled	# acres per area	Cable Total Cost/Area	Number of In-Unit Piles	Material Cost/Pile	Total Cost/Area	
1	14	97	\$2,813.00	305	\$5.00	\$1,525.00	
			FALSE	0	\$5.00	\$0.00	
			FALSE	0	\$5.00	\$0.00	
			FALSE	0	\$5.00	\$0.00	
*Cost includes separating firewood					Materials	Sub Total =	\$1,525.00
Additonal Move-in allowance					Landing Piling	Sub Total =	\$2,813.00
Move-In Allowance	Number of Move-In's	Total Move-In Allowance					
\$1,290.00	1	\$1,290.00					
					Move-In	Sub Total =	\$1,290.00
Slash Endhaul							
Dump Truck hrs	Cost/Hour	Total	Loader hrs	Cost/Hour	Total		
0	\$110.00	\$0.00	0	\$145.00	\$0.00	Sub Total =	\$0.00
						Grand Total =	\$16,880.00

Road Maintenance Cost Summary (Interim and Post Harvest)

Sale: Ridge Walker
Date: September 16, 2025
By: John Tillotson

MBF: 6,397
\$\$/MBF: \$2.47

Type	Equipment/Rationale	Move-in Rate	Times	Hours	Rate	Cost
Interim Operations	Grader 12G	\$972	1	8	\$126	\$1,980
	Dump Truck 12CY	\$205	1	16	\$110	\$1,965
Final Road Maintenance	Grader 12G	\$972	1	18	\$126	\$3,240
	Dump Truck 12CY	\$205	2	18	\$110	\$2,390
	Rubber Tire Backhoe	\$401	1	6	\$97	\$983
	Excavator C315	\$1,005	1	6	\$127	\$1,767
	Vibratory Roller	\$972	1	12	\$97	\$2,136
	Water Truck 2,500 gallon	\$238	1	8	\$113	\$1,142
	Labor			4	\$50	\$200
Total						\$15,803

Interim Operations Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.0	2.0	1.0	8
Vibratory Roller	2.0			

Final Road Maintenance

Production Rates	Miles/day	Distance (miles)	Days	Hours
Grader	2.0	4.5	2.2	18
Vibratory Roller	2.0	4.5	2.2	18

Process and Compact:

Wage Road = 0.86

Walker Ridge Road = 3.27

Unamed Spurs = 0.35

Total = 4.48

SUMMARY OF ALL PROJECT COSTS

SALE NAME: Ridge Walker

Project No. 1: ROAD CONSTRUCTION:

	<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>	
Surfaced	1A to 1B, 1G to 1H	3.85	0.07	\$9,332	
	1I, 1J				
Unsurfaced	1C to 1D, 1E to 1F	21.55	0.41	\$8,365	
	Road Maint.			\$1,687	
	Move-In			\$2,112	
	TOTALS	25.40	0.48		\$21,496

Project No. 2: ROAD IMPROVEMENT:

	<u>Road segment</u>	<u>Length (Sta)</u>	<u>Length (Mile)</u>	<u>Cost</u>	
	I1 to I2,	214.6	4.06	\$57,436	
	I3 to I4				
	Road Maint.			\$5,473	
	Move-In			\$6,855	
	TOTALS		4.06		\$69,764

SPECIAL PROJECTS (Move-In and Road Maint. are included separately as needed, for each Special Project):

<u>Description</u>	<u>Length/Vol.</u>	<u>Cost</u>
TOTAL		

GRAND TOTAL \$91,260

Compiled By: Brittany West

Date: 08/06/2024

Move In and Maintenance Calculator for Construction and Improvement

SALE NAME: Ridge Walker

Project No. 1: ROAD CONSTRUCTION:

	<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
Surfaced	1A to 1B, 1G to 1H	3.85	0.07	\$ 9,332.07
	1I, 1J			
Unsurfaced	1C to 1D, 1E to 1F	21.55	0.41	\$ 8,365.22
	TOTALS	25.40	0.48	\$17,697

Project No. 2: ROAD IMPROVEMENT:

	<u>Road segment</u>	<u>Length/Sta</u>	<u>Length/Mile</u>	<u>Cost</u>
	I1 to I2,	214.60	4.06	\$57,436
	I3 to I4			
	TOTALS		4.06	\$57,436

MOVE IN (Construction & Improvement Only)

	<u>Equipment</u>	<u>Length/Mile</u>	<u>Cost</u>
	Vibratory Roller		\$972.00
	D8 Dozer		\$1,755.00
	C315 Excavator		\$1,005.00
	C330 Excavator		\$1,755.00
	C966 Loader		\$972.00
	14 G Grader		\$972.00
	Water Truck (2,500 gal)		\$238.00
	Dump Truck 20cy (x2)		\$478.00
	Dump Truck 10cy (x4)		\$820.00
	TOTAL		\$8,967.00

ROAD MAINTENANCE (Construction & Improvement Only)

	<u>Length/Mile</u>	<u>Cost</u>
Northrup Quarry Road	0.75	\$7,160.00
Foster Mainline	0.71	
Northrup Road	0.60	
Wage Road	1.85	
TOTAL		\$7,160.00

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Ridge Walker
ROAD: 1A to 1B (1.0), 1C to 1D (10.95), 1E to 1F (10.60), 1G to 1H (2.8
POINTS: 1I, 1J

NEW CONSTRUCTION: 25.40 STATIONS 0.48 MILES
IMPROVEMENT: STATIONS 0.00 MILES

CLEARING & GRUBBING

	Method	Acres/amount	x	Rate	=	Cost
Surfaced 1A to 1B 1G to 1H, 1I, 1J	Scatter outside of right of way (\$/acre)	0.57	x	\$ 1,669	=	\$951.33
Unsurfaced 1C to 1D, 1E to 1F	Scatter outside of right of way (\$/acre)	1.48	x	\$ 1,669	=	\$2,470.12
SUB TOTAL FOR CLEARING & GRUBBING						\$3,421

EXCAVATION

	Material	Cy/amount	x	Rate	=	Cost
1A to 1B 0+00 to 1+00	Balanced construction (\$/sta)	1.00	x	\$154.00	=	\$154.00
1C to 1D 0+00 to 10+95	Balanced construction (\$/sta)	10.95	x	\$154.00	=	\$1,686.30
1E to 1F 0+00 to 10+60	Balanced construction (\$/sta)	10.60	x	\$154.00	=	\$1,632.40
1G to 1H 0+00 to 2+85	Balanced construction (\$/sta)	2.85	x	\$154.00	=	\$438.90
1I 0+00	Construct landing (\$/Indg)	1	x	\$487.00	=	\$487.00
1J 0+00	Construct landing (\$/Indg)	1	x	\$487.00	=	\$487.00
SUB TOTAL FOR EXCAVATION						\$4,886

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost

	Description	Quantity	Rate	Cost
Other/miscellaneous:				
Culvert stakes & markers:				
SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION				\$0

Subtotal of Clearing, Exc., Culv. \$8,307

SURFACING								Stations/ amount	x	Rate/ sta/amt	Cost
Subgrade prep:		Description									
		Grade, Shape and Ditch 16': 1A to 1B (1.0), 1G to 1H (2.85)						3.85	x	\$30.98	\$119.27
		Grade, Shape, Outslope 14': 1C to 1D (10.95), 1E to 1F (10.60)						21.55	x	\$22.89	\$493.28
		Subgrade Compaction: 1A to 1B (1.0), 1C to 1D (10.95), 1E to 1F (10.60), 1G to 1H (2.85)						25.40	x	\$25.19	\$639.83
ROAD SEGMENT 1A to 1B				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1A to 1B		0+00 to 1+00					
				Volume (CY) per		Number of					
Base Rock	6"-0" jaw-run	0+00 to 1+00	10	station	63	stations	1.00	63	\$11.47	\$723	
Junction Rock	4"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$11.47	\$126	
Total Rock for Road Segment:				1A to 1B				74			\$849
ROAD SEGMENT 1C to 1D				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1C to 1D		0+00 to 10+95					
				Volume (CY) per		Number of					
Transition Rock	4"-0" crushed	0+00 to 1+00	8	station	50	stations	1.00	50	\$11.47	\$574	
Junction Rock	1 1/2"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$11.47	\$126	
Total Rock for Road Segment:				1C to 1D				61			\$700
ROAD SEGMENT 1E to 1F				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1E to 1F		0+00 to 10+60					
				Volume (CY) per		Number of					
Transition Rock	4"-0" crushed	0+00 to 1+00	8	station	50	stations	1.00	50	\$11.47	\$574	
Junction Rock	1 1/2"-0" crushed	0+00	N/A	junction	11	junctions	1	11	\$11.47	\$126	
Total Rock for Road Segment:				1E to 1F				61			\$700
ROAD SEGMENT 1G to 1H				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1G to 1H		0+00 to 2+85					
				Volume (CY) per		Number of					
Base Rock	4"-0" crushed	0+00 to 1+85	10	station	63	stations	1.85	117	\$11.47	\$1,337	
Base Rock	4"-0" crushed	1+85 to 2+85	12	station	86	stations	1.00	86	\$11.47	\$986	
Junction Rock	4"-0" crushed	0+00	N/A	junctions	11	junctions	1	11	\$11.47	\$126	
Landings	6"-0" jaw-run	N/A	N/A	landing	88	landings	1	88	\$11.47	\$1,009	
Total Rock for Road Segment:				1G to 1H				302			\$3,459
ROAD SEGMENT 1I				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1I		N/A					
				Volume (CY) per		Number of					
Landings	6"-0" jaw-run	N/A	N/A	landing	88	landings	1	88	\$11.47	\$1,009	
Total Rock for Road Segment:				1I				88			\$1,009
ROAD SEGMENT 1J				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)	Rate/ Sta./ amt.	Cost	
Application	Rock Size and Type	Location	Depth of Rock (inches)	1J		N/A					
				Volume (CY) per		Number of					
Landings	6"-0" jaw-run	N/A	N/A	landing	88	landings	1	88	\$11.47	\$1,009	
Total Rock for Road Segment:				1J				88			\$1,009
Processing:		Description						No.sta	Rate/sta	Cost	
		Water, Process & Compact Base Rock 1A to 1B (1.0), 1C to 1D (1.0), (4"-0", 6"-0" jaw-run): 1E to 1F (1.0), 1G to 1H (2.85)						5.85	\$70.47	\$412.25	

SUMMARY OF CONSTRUCTION COSTS

SALE NAME: Ridge Walker
ROAD: I1 to I2 (196.9), I3 to I4 (17.7)
POINTS:

NEW CONSTRUCTION: STATIONS
IMPROVEMENT: 214.60 STATIONS 4.06 MILES

CLEARING & GRUBBING

Method	Acres/amount	x	Rate	=	Cost

SUB TOTAL FOR CLEARING & GRUBBING

\$0

EXCAVATION

Material	Cy/amount	x	Rate	=	Cost
I1 to I2					
0+00 to 196+90 Establish drainage (C315/hr)	6.0	x	\$127.00	=	\$762.00
Clear debris (14G/hr)	6.0	x	\$126.00	=	\$756.00
5+60 Shape turnout (14G/hr)	1.0	x	\$126.00	=	\$126.00
63+50, 121+40 Clean culvert inlet and outlet (C315/hr)	1.0	x	\$127.00	=	\$127.00
115+30, 140+85 Clean culvert inlet (C315/hr)	1.0	x	\$127.00	=	\$127.00
35+50 Clean culvert outlet (C315/hr)	1.0	x	\$127.00	=	\$127.00
I3 to I4					
0+00 to 17+70 Establish drainage (C315/hr)	2.0	x	\$127.00	=	\$254.00
Clear debris (14G/hr)	2.0	x	\$126.00	=	\$252.00
1+10 Clean culvert inlet (C315/hr)	1.0	x	\$127.00	=	\$127.00

SUB TOTAL FOR EXCAVATION

\$2,658

CULVERT MATERIALS AND INSTALLATION

Location	Dia/type	Lineal ft.	Rate	Cost	Location	Dia/type	Lineal ft.	Rate	Cost

Description	Quantity	Rate	Cost
Other/miscellaneous:			
Culvert stakes & markers:			

SUB TOTAL FOR CULVERT MATERIALS & INSTALLATION

\$0

Subtotal of Clearing, Exc., Culv.

\$2,658

Date: 08/11/2025

Projects Road Maintenance Cost Summary

Sale: Ridge Walker
Date: 06-Aug-25
By: Brittany West

Type	Equipment/Rationale			Hours	Rate	Cost
Project Work	Grader 14G			24	\$126	\$3,024
Final Haul	Vibratory Roller			24	\$97	\$2,328
Road Maintenance	Water Truck 2,500 gallon			16	\$113	\$1,808
Total						\$7,160

Production Rates

Grader

Vibratory Roller

Miles/day	Distance(miles)	Days
1.5	3.91	2.6
1.5	3.91	2.6

NOTE: Northrup Creek Road (from Clatsop County line to Foster Mainline)	0.75	Miles
Foster Mainline (from Northrup Creek Road to Northrup Pit Road)	0.71	Miles
Northrup Quarry Road (from Foster Mainline to Northrup Quarry)	0.60	Miles
Wage Road (Hwy 202 to I1)	1.85	Miles
TOTAL=	3.91	Miles

CRUSHED ROCK COST

SALE NAME:	Ridge Walker
PROJECT:	Nos. 1 and 2
Stockpile:	Northrup Quarry/Stockpile, Cow Creek Stockpile

MATERIAL: 1 1/2"-0", 4"-0", 6"-0" jaw-run

DATE: 08/11/2025
BY: Brittany West

Road Segment	Stations	Cubic Yards	ONE WAY HAUL IN MILES							
			50 MPH	30 MPH	25 MPH	20 MPH	15 MPH	10 MPH	5 MPH	Total Haul
1A to 1B	1.00	63	5.00	3.00	4.00	1.66	0.50	0.10	0.10	14.36
1A to 1B	1.00	11	5.00	3.00	4.00	0.50	0.21	0.10	0.10	12.91
1C to 1D	10.95	11	5.00	3.00	4.00	1.70	0.55	0.10	0.10	14.45
1C to 1D	10.95	50	5.00	3.00	4.00	0.50	0.25	0.15	0.10	13.00
1E to 1F	10.60	11	5.00	3.00	4.00	1.75	0.60	0.11	0.10	14.56
1E to 1F	10.60	50	5.00	3.00	4.00	0.60	0.25	0.16	0.10	13.11
1G to 1H	2.85	88	5.00	3.00	4.00	1.75	0.60	0.19	0.10	14.64
1G to 1H	2.85	214	5.00	3.00	4.00	0.60	0.25	0.19	0.10	13.14
1I	N/A	88	5.00	3.00	4.00	1.70	0.60	0.11	0.10	14.51
1J	N/A	88	5.00	3.00	4.00	1.75	0.60	0.18	0.10	14.63
I1 to I2	196.90	2,724	5.0	3.0	4.0	0.80	0.25	0.17	0.10	13.32
I1 to I2	196.90	99	5.0	3.0	3.3	0.20	0.17	0.10	0.10	11.87
I3 to I4	17.70	136	5.0	3.0	4.0	1.50	0.57	0.15	0.10	14.32
I3 to I4	17.70	187	5.0	3.0	4.0	0.50	0.17	0.10	0.10	12.87
TOTAL	480.00	3,820								AVERAGE
	STA./NO.	CU. YD.								HAUL
CUBIC YARD WEIGHTED HAUL			5.00	3.00	3.98	0.86	0.29	0.16	0.10	13.39
Average Round Trip Distance (miles)										26.78

ROCK HAUL:

Truck type:	<u>D20</u>	No. trucks:	<u>2</u>
Delay min.:	<u>8</u>	Efficiency:	<u>85%</u>

Ave haul:	\$9.37	/cy
Load:	\$0.70	/cy
Spread:	\$1.40	/cy

Truck type:	<u>D12</u>	No. trucks:	<u>4</u>
Delay min.:	<u>6</u>	Efficiency:	<u>85%</u>

Truck type: D10 No. trucks:
 Delay min.: 5 Efficiency: 85%

Production: cy/day = 590

CRUSHED ROCK HAUL COSTS

3,820 cy @ \$11.47 /cy

RIDGE WALKER TIMBER CRUISE REPORT FY 2026

1. **Sale Area Location:** Portions of Sections 8, 9, and 16 of T5N, R6W, W.M., Clatsop County, OR.
2. **Fund Distribution:** BOF 100% Tax Code: 8-01 (100%)
3. **Sale Acreage by Area:**

Unit	Harvest Type	Gross Acres	Stream Buffer Acres	Existing R/W Acres	Reserve Tree Area	New R/W Acres	Net Acres	Survey Method
1	Modified Clearcut	120	19	2	<1	2	97	GIS
2	R/W	2	0	0	0	-	2	LxW
TOTALS		122	19	2	<1	2	99	

4. **Cruisers and Cruise Dates:** Avery Petersen, Ryan Simpson, Kevin Berry, Justin Bush, John Tillotson (8/21/2025).

5. Cruise Method and Computation:

Unit 1: Unit 1 was variable plot cruised with a 54.45 BAF. A total of 58 plots were sampled on a 3 by 6 chain spacing with a grade to count ratio of 1:2, resulting in 20 grade plots and 38 count plots. The difference between reported and mapped count and grade plots can be attributed to the measurement of minor species on count plots.

Data was collected on Allegro 2 data collectors and downloaded to the Atterbury SuperACE 2008 program for computing. See the attached Cruise Design for more details on the cruise method. The cruise calculations were processed in the Astoria District office.

UNIT	CRUISE	TRACT	TYPE	ACRES
1	RWALK	U1	U1CC	99

6. Timber Description:

Unit 1 is a modified clearcut with an average age of 85 years. The stand consists of Douglas-fir, western hemlock, and scattered alder. The average Douglas-fir is approximately 26 inches DBH and 129 feet total height. The average western hemlock is approximately 20 inches DBH and 81 feet total height. The average Sitka spruce is approximately 11 inches DBH and 37 feet total height. Average net volume to be harvested per acre is 65 MBF. All trees were cruised to a merchantable top of six inches DIB, 40% of form point, or an otherwise anticipated break point.

Unit 2 R/W is stocked with timber similar to Unit 1.

7. Statistical Analysis and Stand Summary:

Statistics for Stand B.F. volumes

Unit	Estimated CV	Target SE%	Actual CV	Actual SE%
1	50	8	37.04	4.86

8. Volumes by Species and Log Grade:

Volumes by Species and Grade for All Sale Areas: (MBF) Volumes do not include "in-growth."

Conifer

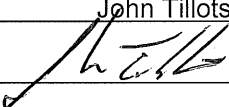
Species	DBH	Net Vol.	2 Saw	3 Saw	3 Saw 12"+	4 Saw	% D & B	% Sale
Douglas-fir	26	6,306	5,227	706	310	63	2.4	98.6
western hemlock	20	87	69	18		0	0	1.4
Sitka spruce	11	4				4	0	<1
TOTALS		6,397	5,296	724	310	67	2.4	

TOTAL VOLUME	6,397
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9. Approvals:

Prepared by: John Tillotson

Date: 9/16/25

Unit Forester Approval: 

Date: 10/1/25

10. **Attachments:** Cruise Design and Map (3 pages)
Volume Report (1 page)
Statistics Report (1 page)
Log Stock Table (1 page)
Stand Table Summary (2 pages)

**CRUISE DESIGN
ASTORIA DISTRICT**

Sale Name: Ridge Walker **Unit** 1

Harvest Type: CC

Approx. Cruise Acres: 100 **Estimated CV%** 50 **Net BF SE%** **Objective** 8 **Net BF**

Planned Sale Volume: 4.895 **MMBF** **Estimated Sale Area Value/Acre:** \$27,000

- A. Cruise Goals:** (a) Grade minimum 90 conifer and 10 hardwood trees:
(b) Sample cruise plots; (c) Other goals; X Determine log grades for sale value;
X Determine snag and leave tree species and sizes.

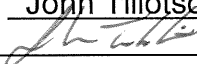
B. Cruise Design:

- 1. Plot Cruises:** BAF 54.45 Full point
Cruise Line Directions 272/92
Cruise Line Spacing 6ch / 396ft (chains/feet)
Cruise Plot Spacing 3ch / 198ft (chains/feet)
Grade/Count Ratio 1/2

C. Tree Measurements:

- 1. Diameter:** Minimum DBH to cruise is 8" for conifers and 8" or hardwoods.
Record dbh to nearest 1/2" for trees < 16", to nearest 1" for trees 16-24", and to nearest 2" for trees > 24". If tree diameters are estimated (only estimate on variable plot cruises), then record to closest estimate.
- 2. Bole Length:** Record bole length to nearest foot at TCD. For trees greater than 100 feet in merchantable height, estimating to the nearest 5 feet is acceptable.
- 3. Top Cruise Diameter (TCD):** Minimum top outside bark for conifer is 7", and 7" for hardwoods or 40 % of dob at 16' form point. Generally, use 7" outside bark for trees < 18" dbh and 40% of dob @ FP for trees > 18" dbh.
- 4. Form Factors:** (1) Measure or estimate a 16' form factor for every conifer tree measured/graded; OR (2) Measure a minimum of 20 form factors for each major conifer species on the cruise area and use these to calculate average FF for the species on the cruise. Hardwood form factors are a Standard 87.
- 5. Tree Segments:** Record log segments in "standard" log lengths in general use, such as 32' and 40' lengths, whenever possible. Do not record odd segments just to maximize grade. Cull segments can be any length. For conifers, minimum merchantable segment length is 12'; for hardwoods, it's 8'. Maximum segment length is 40'. One foot of trim is assumed for each merch. log segment. Do not use "double dash" (--) feature on the data recorder except for the top segment of the tree.

- 6. Species, Sort, and Grade Codes:** A. Species: Record as D (Douglas-fir); H (Western hemlock); S (Sitka Spruce); C (Western red cedar); NF (All true firs; A (Red alder); M (Bigleaf maple). For "leave trees" in partial cuts, or for marked "wildlife trees," add an "L" to the species code (such as DL, HL, CL, etc.)
B. Sort: Use code "1" (Domestic).
C. Grade: A = 1 Peeler; B = 2 Peeler; C = 3 Peeler; D = Special Mill; 2 = 2 Sawmill; 3 = 3 Sawmill; 4 = 4 Sawmill; R = Camp Run; 0 = Cull ; 9 = Utility
Hardwoods: #1 Sawmill = 12"+ scaling diameter; #2 Sawmill = 10" and 11"; #3 Sawmill = 8" and 9"; #4 Sawmill = 6" and 7"
- 7. Deductions:** Estimate visible defect or damage as a "length deduction" (most often), or as a "diameter deduction," as applicable. Estimate hidden defect and breakage (usually some breakage is encountered in trees > 100 feet in height) on a "per tree" basis. Steep and broken topography generally results in higher breakage percentages than gentler topography, and hemlock generally breaks more than D-fir and spruce.
- 8. Standard Field Procedures:** Plot Type Cruises: Mark cruise line beginning and end points with blue/yellow flagging. Write plot identification numbers and line direction on the ribbon. At each plot, tie yellow flagging above eye level near plot center and another yellow flagging around a sturdy wooden stake marking plot center. On yellow flagging, write the plot identification number. Between plots, along the cruise line, tie blue flagging at intervisible points, not to exceed 100' apart. On "measure/grade" plots write the tree number and/or tree diameter on at least the first measured tree (clockwise from the line direction) in yellow paint. All trees on the plot may be marked this way, if the cruiser chooses.
ITS and 100% Cruises: Mark cruise "strips" with various colored flagging (not pink). Mark trees measured and graded with yellow paint.
- 9. Cruising Equipment:** Relaskop, Rangefinder or Lazer, Logger's Tape (with DBH on back), Biltmore Stick, Compass, Cruise Cards or Data Recorder, Cruise Design, Cruise Map, Yellow Flagging, Blue Flagging, Yellow Paint.
- 10. Attachments:** A. Cruise Map (showing cruise unit boundaries, roads, streams, approx. acres/unit, cruise lines and plot locations, legal description and section lines, BAF or plot size, measure/count plot ratio, north arrow, and scale.

Cruise Design by: John Tillotson
Approved by: 
Date: 8/20/2025

TIMBER CRUISE MAP

TIMBER SALE CONTRACT
RIDGE WALKER

LOCATED IN PORTIONS OF
SECTIONS 8, 9, AND 16 OF
T5N, R6W, W.M., CLATSOP

BAF = 54.45

Line Spacing = 6 chains (396 ft)

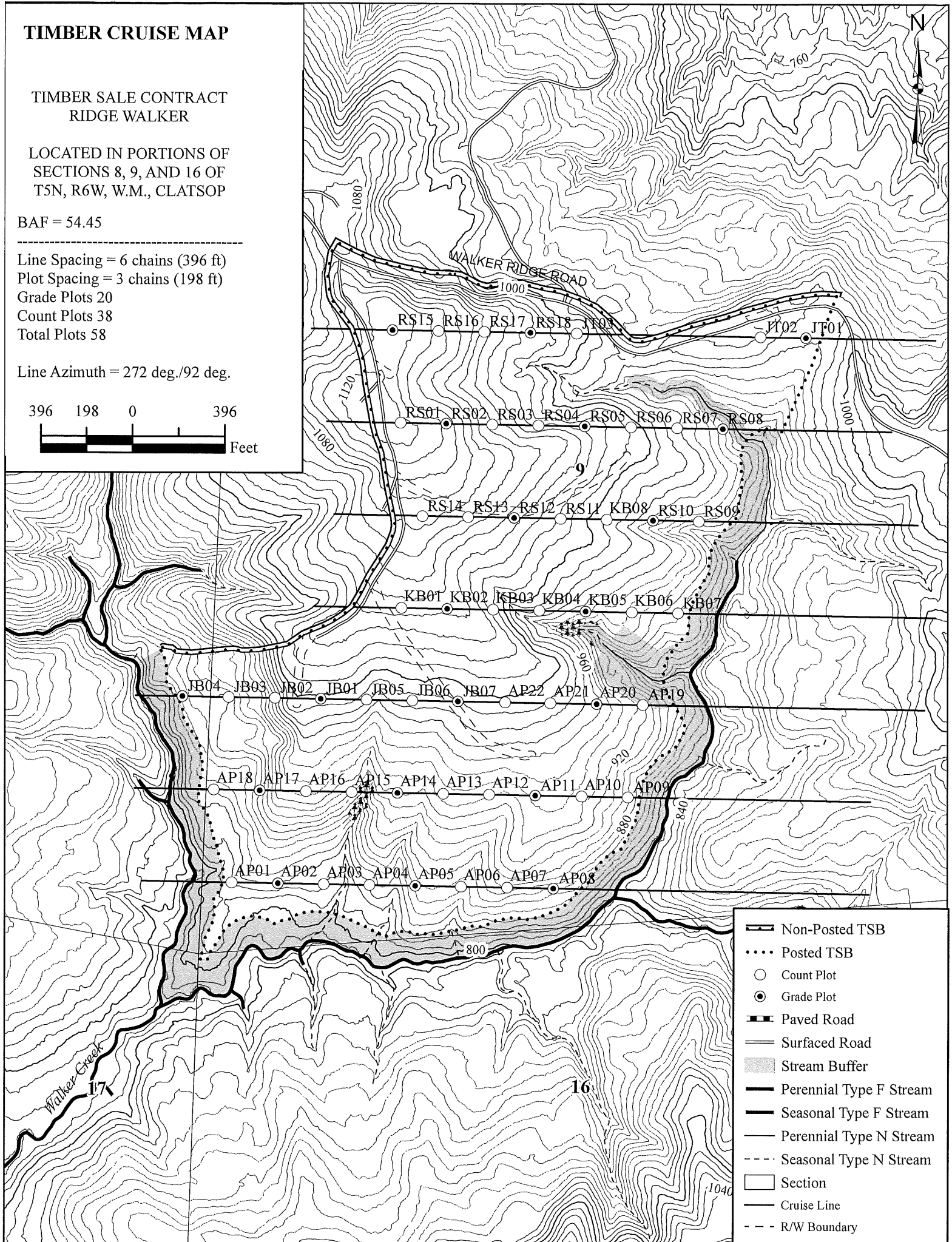
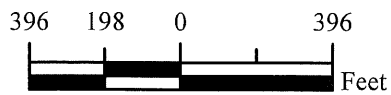
Plot Spacing = 3 chains (198 ft)

Grade Plots 20

Count Plots 38

Total Plots 58

Line Azimuth = 272 deg./92 deg.



Statistics of Sampled Population

State, County:	Lths: ACI-2023	Species: CLATSOP	Page: 1/1
Project: RWALK	#Plots 58	Sort: ODF-C.CUT	Date: 09/16/2025
Tract: U1	# Trees: 309	Grade: ODF-C.CUT	Cruised: 08/01/2025
Stand: U1CC	# Measured Trees: 113	Price: ACI-2018	Grown To:
Acres: 99.00	# Count Trees: 196	Cost: ACI-2023	Edited: 09/16/2025

Sample data collection information

	Total Plots	Sample Trees	Trees /Plot	Trees /Acre	Est Total Trees	% Sample Trees
Basal Plots (B)	23	113	4.91	30.296	2,999	3.77
Basal DBH Count Plots (B)	35	193	5.51	50.702	5,019	3.85
Basal Count Plots (B)	2	3	1.50	.000		.00

Stand Summary - Averages

Species Group	St	Sample Tres	QM Dbh	Avg Total Ht	Trees /Acre	Basal Area /Acre	RD %	Mbf CV %	Mbf SE %	Tons /Acre	Net Ccf /Acre	Net Mbf /Acre	Total Net Ccf	Total Net Mbf
DOUG FIR		103	25.9	129	74.626	272.20	53.53	37.8	5.0	339	140.46	63.697	13,906	6,306
WHEMLOCK		1	20.0	81	3.012	6.57	1.47	35.0	14.3	6	2.32	.873	230	86
S SPRUCE		1	11.0	37	1.422	0.94	0.28				0.17	.043	17	4
		105	25.5	126	79.060	279.71	55.28	37.0	4.9	346	142.95	64.613	14,152	6,397

Confidence Level (CL) 68.26 out of 100.

Standard Deviation (SD) 1.00

Coefficient of Variation % (CV) and Stand Error of Estimate % (SE) are both computed from plot data

Measured Unit	SD	CL	CV%	SE%	per-Acre Range			Plots Required for SE%			Total Volume Range		
					Low	Avg	High	5%	10%	15%	Low	Avg	High
Net Mbf (1000 BdFt)	1.00	68.26	37.04	4.86	61.47	64.61	67.76	54	13	6	6,086	6,397	6,708
Net Ccf (100 CuFt)	1.00	68.26	37.09	4.87	135.99	142.95	149.91	55	13	6	13,463	14,152	14,842
Net Tons	1.00	68.26	37.06	4.87	328.82	345.64	362.46	54	13	6	32,553	34,218	35,883
Basal Area	1.00	68.26	35.40	4.65	276.55	290.03	303.52	50	12	5			
Trees	1.00	68.26	54.03	7.09	75.25	81.00	86.75	116	29	12			

	SD	CL	CV%	SE%	per-Tree Range			Sample Trees Required		
					Low	Avg	High			
Sample Trees BF	1.00	68.26	70.61	5.58	1,040	1,102	1,163	199	49	22
Sample Trees CF	1.00	68.26	63.71	5.04	224	236	248	162	40	18

Trees per Plot	Number Required		
Required Measured Trees per Plot - BdFt per Acre	3	3	3
Required Measured Trees per Plot - CuFt per Acre	2	3	3

Log Stock - Mbf by Species, Sort, Grade, Len, Dia Class

State, County:

Lths And Dias ACI-2023

Species: CLATSOP

Page: 1/1

Project: RWALK

Plots: 58

Sort: ODF-C.CUT

Date: 09/16/2025

Tract: U1

Trees: 309

Grade: ODF-C.CUT

Cruised: 08/01/2025

Stand: U1CC

Measured Trees: 113

Price: ACI-2018

Grown To:

Acres: 99.00

Count Trees: 196

Cost: ACI-2023

Edited: 09/16/2025

Species	Stat us	Srt	Grd	Log Len Class	Gross Mbf	% Def	Net Mbf	% Spp	BdFt Per Acre	Net Mbf by Scaling Diameter in Inches								
										2-4	5-7	8-12	13-18	19-26	27-32	32-40	41-99	
D		DO	2S	16-21	11	.0	11	0.2	106					11				
D		DO	2S	24-27	9	.0	9	0.1	92			9						
D		DO	2S	28-31	5	.0	5	0.1	55				5					
D		DO	2S	32-35	264	.5	263	4.2	2,654			70	117	39	37			
D		DO	2S	36-39	32	.0	32	0.5	319			19	13					
D		DO	2S	40+	5,000	1.8	4,907	77.8	49,568			202	1,279	2,690	737			
D		DO	3S	12-15	2	.0	2	0.0	18		2							
D		DO	3S	16-21	18	.0	18	0.3	184		4	15						
D		DO	3S	24-27	39	.0	39	0.6	394		4	35						
D		DO	3S	28-31	56	4.8	54	0.9	542		21	23	9					
D		DO	3S	32-35	243	7.3	226	3.6	2,280		30	177	18					
D		DO	3S	36-39	71	52.6	34	0.5	340		5	20		9				
D		DO	3S	40+	649	.7	644	10.2	6,507		53	320		64	207			
D		DO	4S	16-21	32	.0	32	0.5	322		23	5	3					
D		DO	4S	24-27	9	.0	9	0.1	89		9							
D		DO	4S	28-31	5	.0	5	0.1	54		5							
D		DO	4S	32-35	2	.0	2	0.0	25		2							
D		DO	4S	40+	15	.0	15	0.2	148		15							
D Total					6,462	2.4	6,306	98.6	63,697		173	895	1,444	2,813	981			
S		DO	4S	24-27	4	.0	4	100.0	43		4							
S Total					4		4	0.1	43		4							
H		DO	2S	32-35	69	.0	69	79.3	693				69					
H		DO	3S	32-35	18	.0	18	20.7	181		18							
H Total					86		86	1.4	873		18		69					
Stand(s)/Project Totals					6,553	2.4	6,397	100.0	64,613									
Percent Measured Tree Net Mbf =										100.0		195	895	1,513	2,813	981		

Stand Summary Report

State, County:

Lths & Dias: ACI-2023

Species CLATSOP

Page: 1/2

Project: RWALK

Plots: 58

Sort: ODF-C.CUT

Date: 09/16/2025

Tract: U1

Trees: 309

Grade: ODF-C.CUT

Cruised: 08/01/2025

Stand: U1CC

Measured Trees: 113

Price: ACI-2018

Grown To:

Acres: 99.00

Count Trees: 196

Cost: ACI-2023

Edited: 09/16/2025

											Net Per Log		Net Per Acre			BdFt Def	Total Net		
Spp	St	Dbh	Smpl Trees	Avg Age	Avg FF	Total Ht	Trees /Ac	BA /Ac	Logs /Ac	Ht/D Inches	CuFt	BdFt	Tons	CuFt	BdFt	%	Tons	Ccf	Mbf
D		11	1	85	89	73	1.422	0.94	1.422	80.0	17	60	1	24	85	0.0	58	24	8
D		12	1	85	86	149	1.195	0.94	2.390	148.8	20	75	1	47	179	0.0	111	46	18
D		13	1	85	86	104	1.018	0.94	2.037	96.4	17	65	1	35	132	0.0	83	34	13
D		14	3	85	88	113	2.634	2.82	5.268	97.1	22	87	3	115	457	0.0	275	114	45
D		16	1	85	89	129	0.672	0.94	2.017	96.6	23	90	1	46	182	0.0	109	45	18
D		18	1	85	86	133	0.531	0.94	1.593	88.9	29	107	1	47	170	0.0	112	46	17
D		19	4	85	85	105	1.907	3.75	4.290	66.0	35	118	4	150	505	0.0	359	149	50
D		20	2	85	86	135	0.860	1.88	2.581	81.0	38	150	2	99	387	2.2	237	98	38
D		21	4	85	89	116	1.561	3.75	4.293	66.5	40	165	4	172	706	0.0	412	171	70
D		22	2	85	88	119	0.711	1.88	2.133	65.1	41	173	2	88	370	0.0	211	87	37
D		23	5	85	87	123	1.627	4.69	4.554	64.4	49	200	5	223	911	1.1	534	221	90
D		25	3	85	89	119	0.826	2.82	2.203	57.3	61	251	3	133	553	1.5	319	132	55
D		26	3	85	87	129	48.884	178.34	128.778	60.0	72	324	222	9,208	41,749	2.4	22,015	9,116	4,133
D		27	4	85	87	134	0.944	3.75	2.597	59.6	72	319	5	188	829	1.4	450	186	82
D		28	8	85	85	141	1.756	7.51	5.268	60.5	74	317	9	390	1,670	1.7	933	386	165
D		30	2	85	77	149	0.382	1.88	1.147	59.7	82	272	2	94	312	19.6	224	93	31
D		31	9	85	85	150	1.612	8.45	4.835	58.0	95	438	11	459	2,118	1.4	1,097	454	210
D		32	4	85	86	153	0.672	3.75	2.017	57.4	104	502	5	210	1,012	0.0	502	208	100
D		33	3	85	89	154	0.474	2.82	1.422	55.9	112	463	4	159	659	20.4	380	158	65
D		34	2	85	86	153	0.298	1.88	0.893	53.9	119	570	3	106	509	1.5	254	105	50
D		35	3	85	87	145	0.421	2.82	1.264	49.7	118	562	4	149	711	2.0	356	147	70
D		36	6	85	89	152	0.797	5.63	2.523	50.5	127	642	8	320	1,619	4.8	764	316	160
D		37	7	85	85	155	0.880	6.57	2.891	50.3	126	636	9	364	1,839	1.0	871	361	182
D		38	6	85	87	149	0.715	5.63	2.264	46.9	136	696	7	309	1,576	1.8	738	306	156
D		39	4	85	86	156	0.453	3.75	1.358	48.0	158	792	5	214	1,075	2.9	511	212	106
D		40	3	85	83	147	0.323	2.82	0.968	44.0	152	720	4	147	697	2.8	353	146	69
D		41	3	85	87	143	0.307	2.82	0.921	41.8	164	802	4	151	739	5.0	362	150	73
D		42	3	85	85	151	0.293	2.82	0.878	43.0	173	858	4	152	753	1.8	364	151	75
D		43	3	85	84	143	0.279	2.82	0.838	40.0	173	840	4	145	704	1.1	347	144	70
D		44	1	85	83	156	0.089	0.94	0.267	42.5	192	950	1	51	253	0.0	123	51	25
D		46	1	85	83	151	0.081	0.94	0.244	39.3	205	970	1	50	237	4.8	120	50	23
D			103	85	87	129	74.626	272.20	196.156	63.9	72	325	339	14,046	63,697	2.4	33,582	13,906	6,306
H		20	1	85	89	81	3.012	6.57	6.023	48.8	39	145	6	232	873	0.0	597	230	86
H			1	85	89	81	3.012	6.57	6.023	48.8	39	145	6	232	873	0.0	597	230	86
SN			0	0		0	0.000	1.88	0.000							0.0			
SN		15	0	85		79	0.765	0.94	0.000	63.2						0.0			
SN		21	0	85		38	0.390	0.94	0.000	21.7						0.0			
SN		25	0	85		136	0.275	0.94	0.000	65.3						0.0			
SN		26	0	85	86	60	0.255	0.94	0.000	27.7						0.0			
SN		38	0	85		26	0.119	0.94	0.000	8.2						0.0			
SN		43	0	85		33	0.093	0.94	0.000	9.2						0.0			
SN		86	0	85		82	0.023	0.94	0.000	11.4						0.0			
SN		97	0	85		50	0.018	0.94	0.000	6.2						0.0			
SN			0	85	11	71	1.939	9.39	0.000	43.4	0	0				0.0			
S		11	1	85	83	37	1.422	0.94	1.422	40.4	12	30		17	43	0.0	39	17	4
S			1	85	83	37	1.422	0.94	1.422	40.4	12	30		17	43	0.0	39	17	4
HL			0	0		0	0.000	0.94	0.000							0.0			

Species, Sort, Grade - Mbf by Species, Sort, Grade; Summarized: Len, Dia Classes

State, County:

Lths and Dias: ACL-2023

Species: CLATSOP

Page: 1/1

Project: RWALK

Plots: 58

Sort: ODF-C.CUT

Date: 09/16/2025

Tract: U1

Trees: 309

Grade: ODF-C.CUT

Cruised: 08/01/2025

Stand: U1CC

Meas Trees: 113

Price: ACL-2018

Grown:

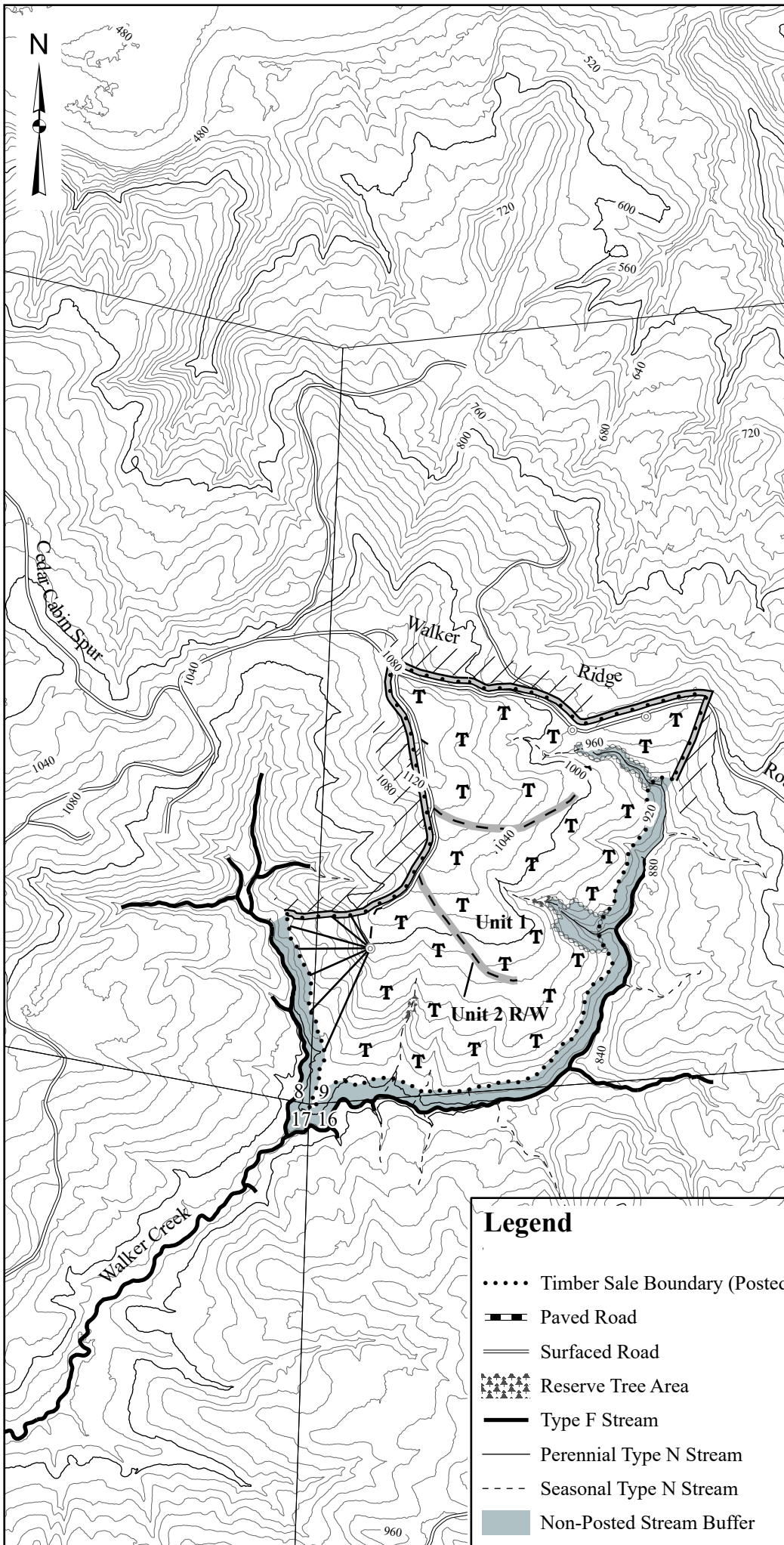
Acres: 99.00

Count Trees: 196

Cost: ACL-2023

Edited: 09/16/2025

Species Stat Srt Grd				% Net BdFt	BdFt per Acre			Total Net Mbf	Percent (%) of Net BdFt Volume												Average Log			Logs /Acre				
					% Def	Gross	Net		Log Scale Dia						Log Length						Len (Ft)	Dia (In)	BdFt		CuFt / Len			
									2-4	5-7	8-12	13-18	19-26	27-32	32-40	41-99	12-15	16-21	22-23	24-27						28-31	32-35	36-39
D	DO	2S		82.9	1.8	53,740	52,794	5,227			6	27	52	15				0	0	0	5	1	94	38	18.2	547	2.9	96,563
D	DO	3S		16.1	5.8	10,897	10,266	1,016		12	58	3	7	20			0	2	4	5	22	3	63	34	9.7	125	1.0	81,993
D	DO	4S		1.0	0.0	638	638	63		86	9	5					51		14	8	4	23	23	7.2	36	0.5	17,600	
D	Totals			100.0	2.0	65,274	63,697	6,306		3	14	23	45	16			1	1	1	8	1	88	36	13.6	325	2.0	196,156	
S	DO	4S		100.0		43	43	4		100								100					24	6.9	30	0.5	1,422	
S	Totals			100.0		43	43	4		100								100					24	6.9	30	0.5	1,422	
H	DO	2S		79.3		693	693	69				100								100			32	14.8	230	1.7	3,012	
H	DO	3S		20.7		181	181	18		100										100			32	7.5	60	0.7	3,012	
H	Totals			100.0		873	873	86		21		79								100			32	11.1	145	1.2	6,023	
Totals All Species				100.0	2.0	66,190	64,613	6,397		3	14	24	44	15			1	1	1	9	1	87	35	13.5	317	2.0	203,602	



LOGGING PLAN MAP

OF TIMBER SALE CONTRACT
NO. AST-341-2026-W01219-02
RIDGE WALKER
LOCATED IN PORTIONS OF
SECTIONS 8, 9, 16, AND 17 OF
T5N, R6W, W.M.,
CLATSOP COUNTY, OREGON

Approximate Net Acres

Unit 1 (CC) = 97

Unit 2 R/W = 2

Total = 99

Logging Breakdown

Unit	Cable	Ground	Acres
Unit 1 (CC)	6%	94%	97
Unit 2 (R/W)	0%	100%	2
Total	6%	94%	99

0 500 1,000 2,000
Feet

1 inch equals 1,000 Feet

Contour Interval = 20 feet

Legend

..... Timber Sale Boundary (Posted)

▬ Paved Road

▬ Surfaced Road

▬ Reserve Tree Area

▬ Type F Stream

▬ Perennial Type N Stream

▬ Seasonal Type N Stream

▬ Non-Posted Stream Buffer

▬ New Construction - Surfaced

▬ New Construction - Unsurfaced

▬ Sections

▬ Cable Setting

▬ Reforestation Area

⊙ Landing to Construct

T Ground Based Setting